

Panasonic

Colour Television
TC-21S70M

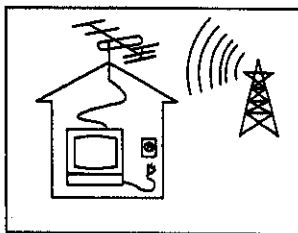
Please read the operating instructions completely before operating this set.

TQB4G0330

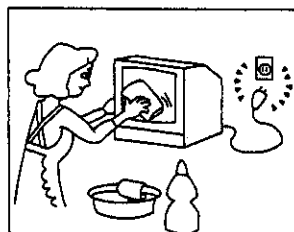
Dear Panasonic customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new colour television.

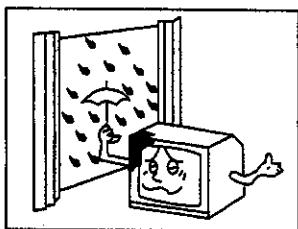
Safety Instructions



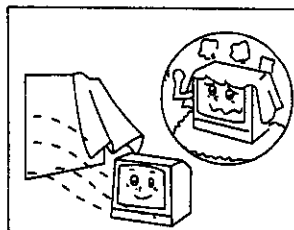
The TV set can be operated on AC 110-240v, 50/60 Hz



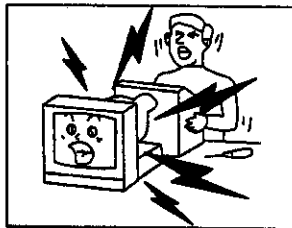
The cabinet and picture tube can be kept in good condition by simply wiping with a clean, soft cloth moistened with mild detergent and water. Do not use solutions containing benzol, petroleum or a chemical cloth. For safety, remove the plug from the wall outlet.



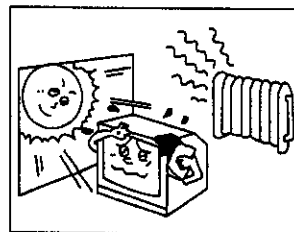
To prevent damage which may result in fire or electrical shock, do not expose the TV set to rain or excessive moisture.



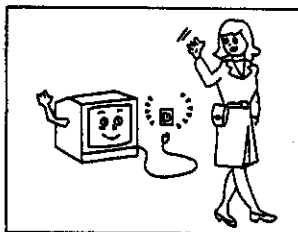
Adequate ventilation is essential to prevent failure of electrical components.



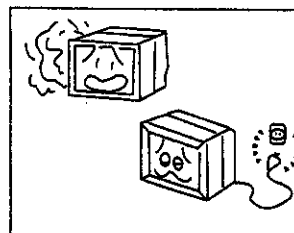
Do not remove the rear cover, as live parts are accessible when it is removed.



Avoid exposing the TV set to direct sunlight and other source of heat.

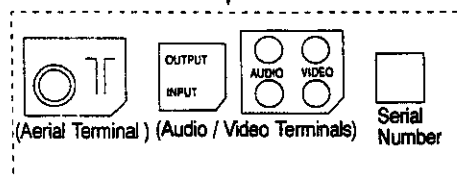
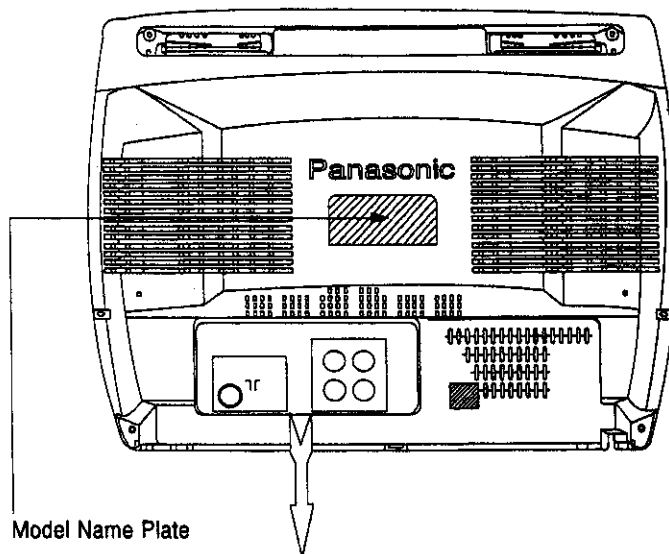
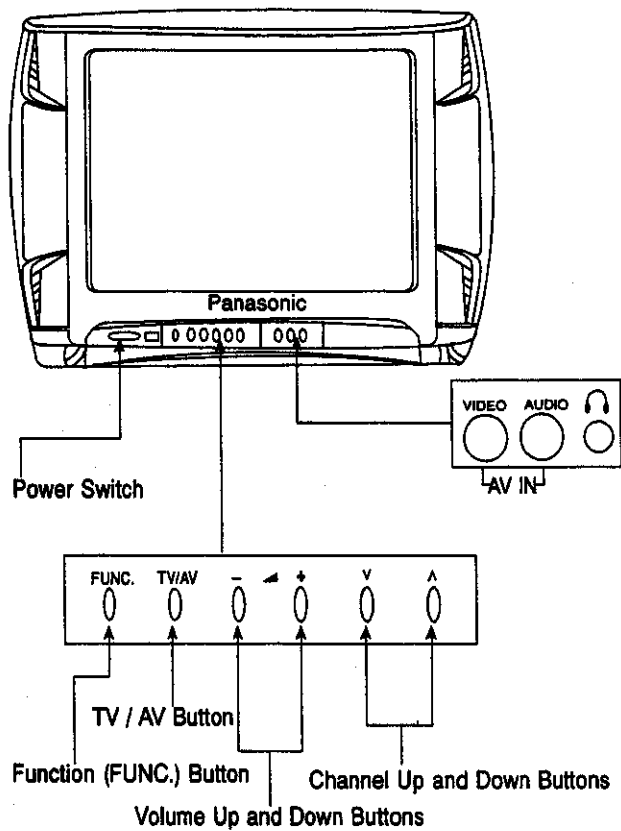


Remove the plug from the wall outlet (Power point) when the TV set is not used for a prolonged period of time.



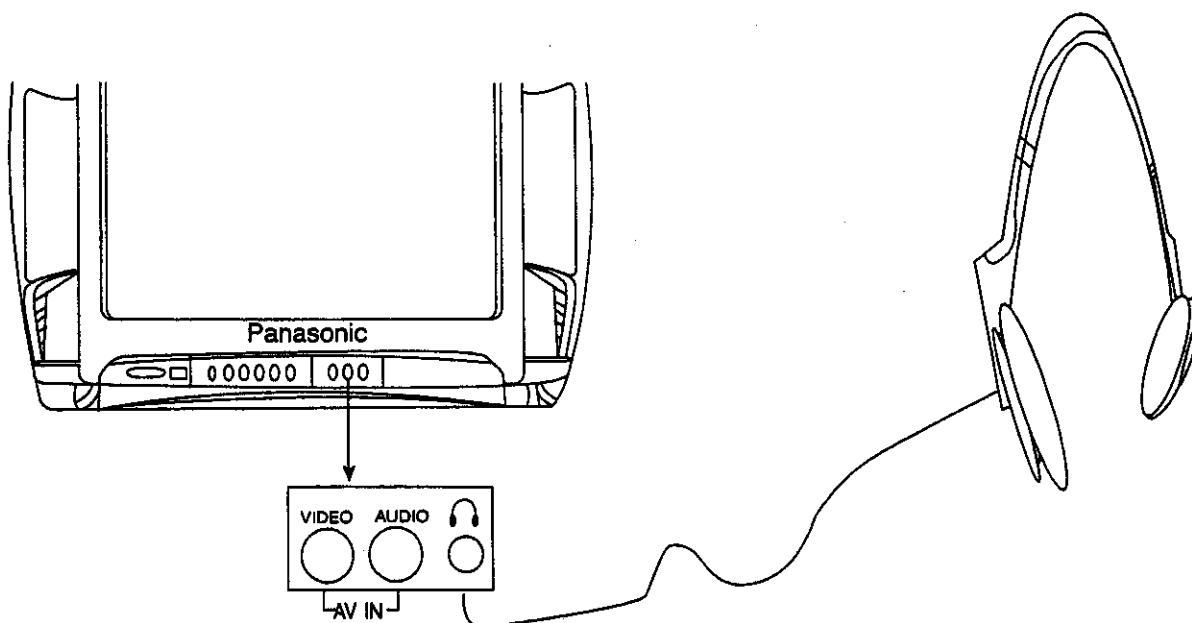
Do not use this set if abnormal operation occurs.
EX: smoke, odd sounds or smells, turn the power switch off and disconnect the AC power if you notice any unusual operation.

Location of Control (TV)



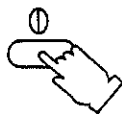
Location of Control (TV)

Plug the headphone jack as shown below:



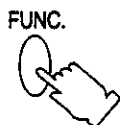
General Operations

1. Power Switch

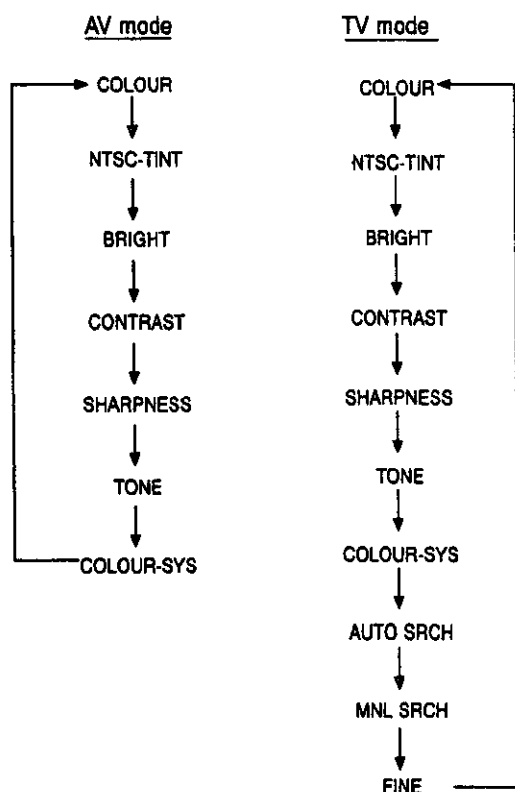


Press to switch on the TV set. To switch off press it again.

2. Function (FUNC.) Button



Press this button to display the functions listed below :



During above display, press the Volume Up "+" or Down "-" buttons to adjust the level of COLOUR, NTSC-TINT, BRIGHT, CONTRAST, SHARPNESS and TONE.

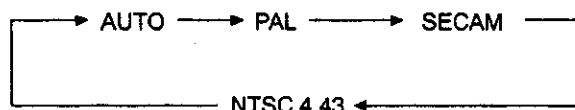
Note :

NTSC-TINT appear if NTSC 4.43 is selected.

For AUTO SRCH, MNL SRCH and FINE please refer to page 6 and 7.

In COLOUR-SYS, the TV set is automatically set to the AUTO mode. If a clear picture cannot be obtained when receiving broadcast or AV signal, press the Volume Up button repeatedly until the optimum picture is received. When the Volume Up button is pressed, the Colour System will change as below :

TV mode / AV mode

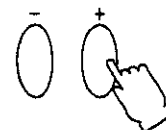


3. TV /AV Selection Button



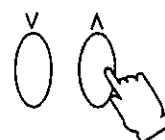
Press the TV /AV button to select either TV mode or AV mode.

4. Volume Up (+) and Down (-) Buttons



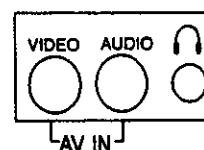
Press these buttons to adjust the sound level.

5. Programme Number Up and Down Buttons



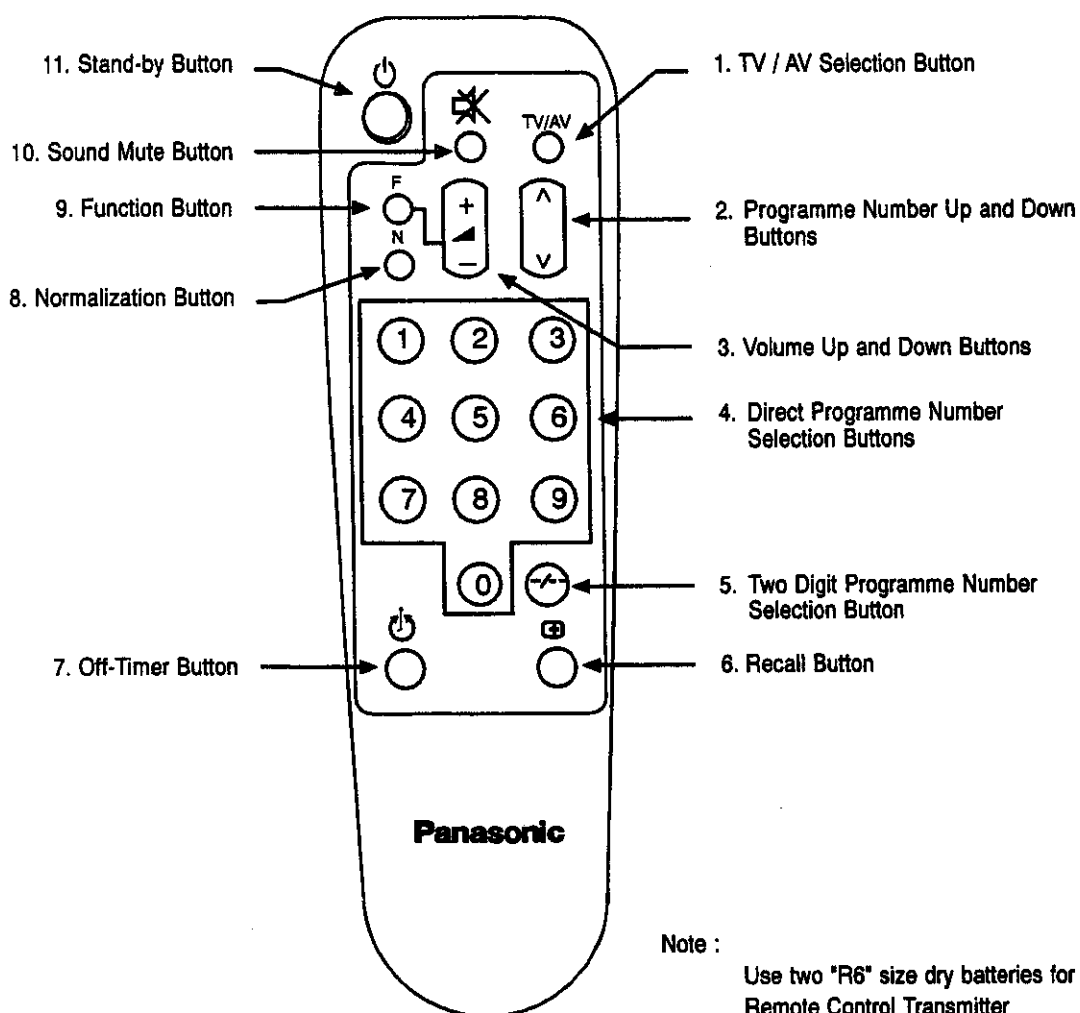
Press these buttons to select the next higher or next lower Programme Number.

6. Video Input, Audio Input and Headphones Terminals

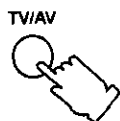


For the detail explanations, please refer to page 2, 9 and 10.

Remote Control Transmitter Operations



1. TV /AV Selection Button



Press to select either TV mode or AV mode.

2. Programme Number Up and Down Buttons



Press these buttons to select the higher or lower Programme Number.

3. Volume Up and Down Buttons



Press these buttons to adjust the sound level.

4. Direct Programme Number selection Buttons



Press once to select Programme Number between 0-9.

5. Two Digit Programme Number Selection Button

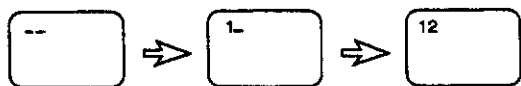


Press the button and follow by the required numbers to select Programme Number from 10 to 99.

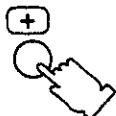
Remote Control Transmitter Operations

e.g. To select Programme Number 12.

1. Press this button once "—".
2. Press button number "1".
3. Press button number "2".

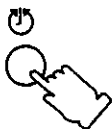


6. Recall Button



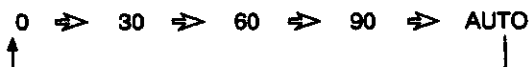
Press this button to display the current Programme Number, Colour system and Off-Timer.
In AV mode, a blue colour scree appears if there is no AV signal (when the recall function is off).

7. Off-Timer Button



The TV set can be preset to switch off after a fixed period of time by pressing this button.

The Off-time can be selected are as follows :

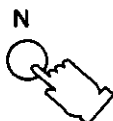


In Auto mode, if the TV set is not switched off, it will automatically go to stand-by condition 5 minutes after the TV station ends broadcasting.

How to cancel the off-timer setting :

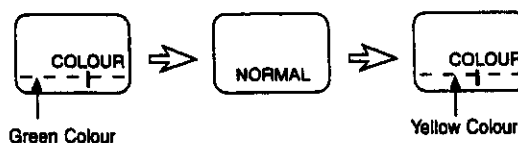
1. Set the pre-set time condition to " 0 " mode by pressing the " off-timer " button or
2. Switch off the TV set.

8. Normalization (N) Button

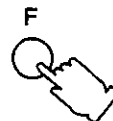


This button can be used for setting the Colour, Tint (NTSC only), Bright, Contrast, sharpness and Tone.
When this button is pressed, all functions setting are reset to the factory preset level (in yellow colour).

e.g. When this button is pressed after adjusting colour function.



9. Function (F) Button



Press this button to select the COLOUR, NTSC-TINT, BRIGHT, CONTRAST, SHARPNESS and TONE.

All functions can be adjusted by pressing the Volume Up and Down buttons.

Note :

NTSC-TINT will appear if NTSC 4.43 is selected.

10. Sound Mute Button



Press the button to mute the sound.

To cancel the mute mode :

- a) Press this button again.
- b) Press the Volume Up or Down buttons.

11. Stand-by Button



Press the button to switch the TV set off (in stand-by condition).

To switch ON again :

- a. Press Stand-by button again or,
- b. Press one of the Direct Programme Number Selection buttons (0 ~ 9), or
- c. Press Programme Number Up or Down buttons.

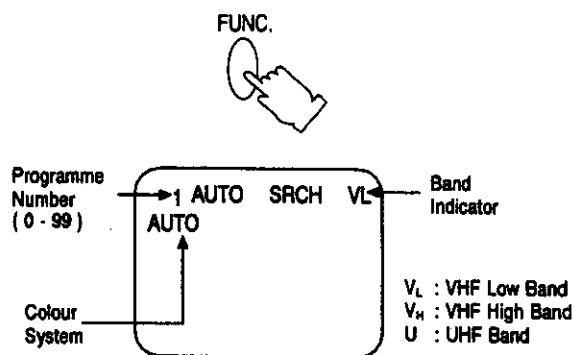
Note :

Do not leave your TV set on stand-by mode for a long period of time. It is better to switch it off when you are away.

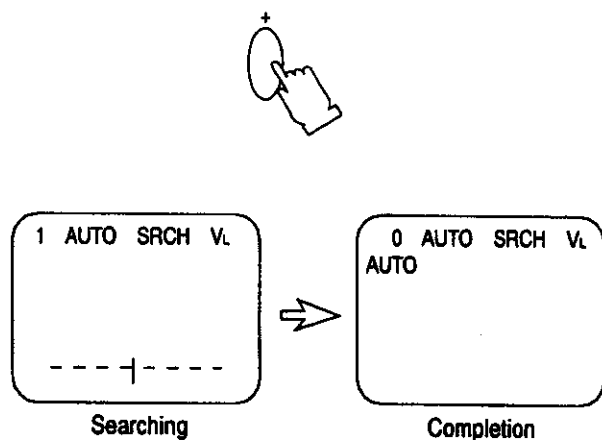
Tuning Procedure

How to Tune In Your TV set (Automatic Search)

1. Switch on your TV set.
2. Press the FUNCTION button until on-screen display appears as follows :



3. Press the Volume Up (+) button.
The on-screen display appears as shown :



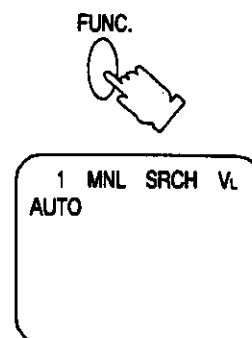
The best tuning position is automatically memorized.

4. Press the FUNCTION button until COLOUR is displayed on the screen to return the TV set to the normal operating mode. (On screen display of COLOUR will disappear after a few seconds).

A maximum of 100 Programme Number (0~99) can be programmed.

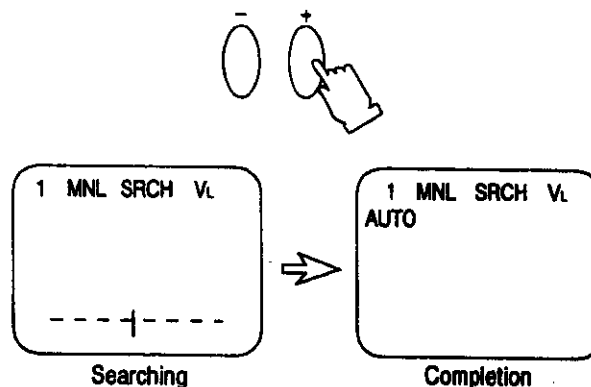
How to Tune In Your TV Set (Manual Search)

1. Switch on your TV set.
2. Press the FUNCTION button until the on-screen display appears as shown below :



Press either the Programme Number Up or Down buttons to select the desired Programme Number.

3. Press either the Volume Up or Down buttons, the TV station broadcasting on the next higher or lower frequency will be automatically tuned and memorized.



If an undesired TV station is received, press the same button again until the desired TV station is tuned.

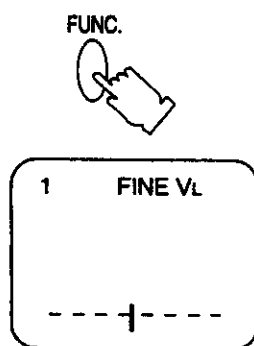
4. Use the Programme Number Up or Down buttons to select the next desired channel to tune the TV station of your choice.
Repeat step 2 and 3 to tune all the available TV station on the remaining Programme Number. Ensure that a new programme number is set (step 2) before tuning the next station.
5. Press the FUNCTION button until COLOUR is displayed on the screen to return the TV set to the normal operating mode. (On screen display of COLOUR will disappear after a few seconds.)

Fine Tuning Operation

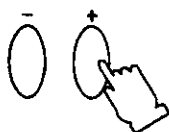
Under normal reception condition, this function is not used. However in areas of poor reception or constant interference, a slight adjustment on the fine tuning can improve the picture and sound quality.

How to set the Fine Tuning Operation

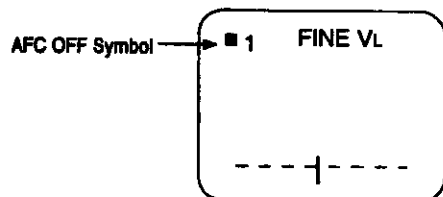
1. Press the FUNCTION button until on screen display appears as follow :



2. Press either the Volume Up or Down buttons continuously.



When the above fine tuning operation has been performed, the "■" symbol appear on the left of Programme Number. The AFC function is de-activated.



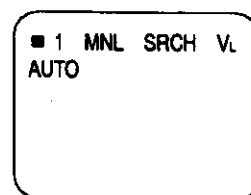
3. Press the FUNCTION button until COLOUR is displayed on the screen to return the TV set to the normal operating mode.

How to Cancel the Fine Tuning Operation

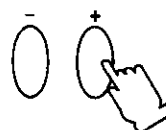
If you want to reset this Programme Number to the automatically tuned condition with the AFC activated, perform the following step :



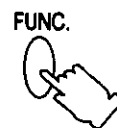
1. Press the FUNCTION button until on screen display appears as follow :



2. Press either the Volume Up or Down buttons.



3. Press the FUNCTION button until COLOUR is displayed on the screen to return the TV set to the normal operating mode.

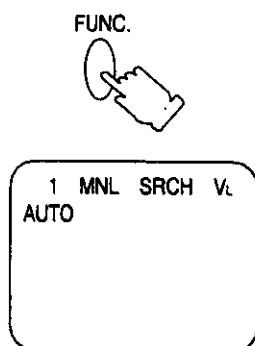


Skip Operation

You can skip the unused or undesired Programme Number by using the TV /AV function button.

How to set the Skip operation

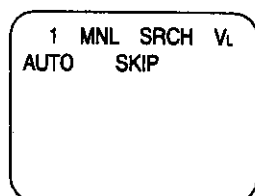
1. Press the FUNCTION button until MNL SRCH is displayed on the screen as shown below :



2. Select the Programme Number which you want to skip.
3. Press the TV /AV button.



The on-screen display will appear as follow :

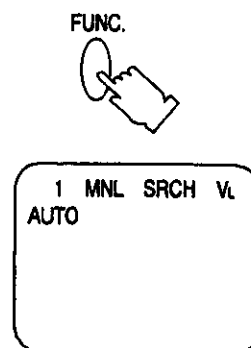


If more Programme Numbers are to be skipped, repeat step 2 and 3.

4. Press the FUNCTION button until " COLOUR " is displayed on the screen to return the TV set to the normal operating mode.

How to cancel Skip operation

1. Press the FUNCTION button until MNL SRCH is displayed on the screen as shown below :



2. Select the skipped Programme Number by using the Programme Number Up or Down buttons.



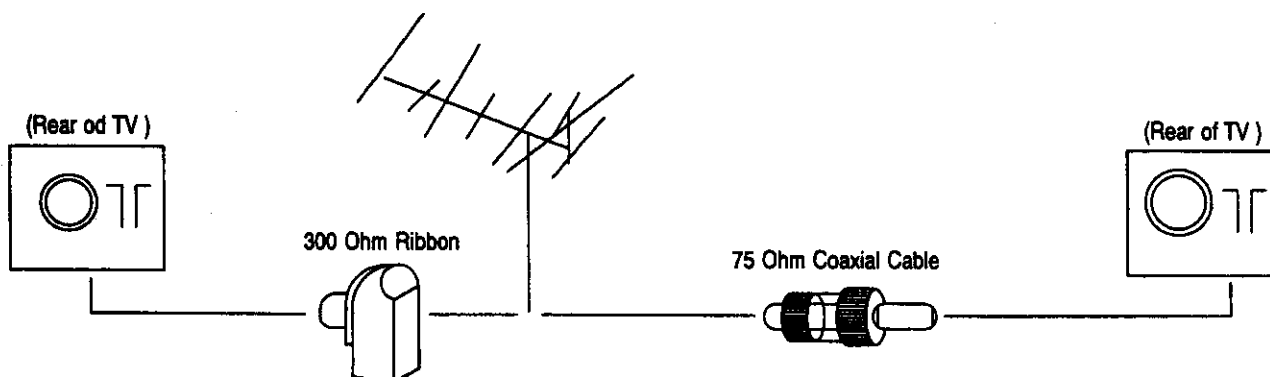
3. Press the TV /AV button
If more Programme Numbers are to be cancelled, repeat step 2 and 3.



4. Press the FUNCTION button until " COLOUR " is displayed on the screen to return the TV set to the normal operating mode.

Antenna Connection

To obtain the best quality picture and sound, plug the connectors (300 Ohm Ribbon or 75 Ohm Coaxial Cable) to the antenna terminal on the rear of TV set.



Connections (Audio Input and Video Input)

To watch the VCR picture :

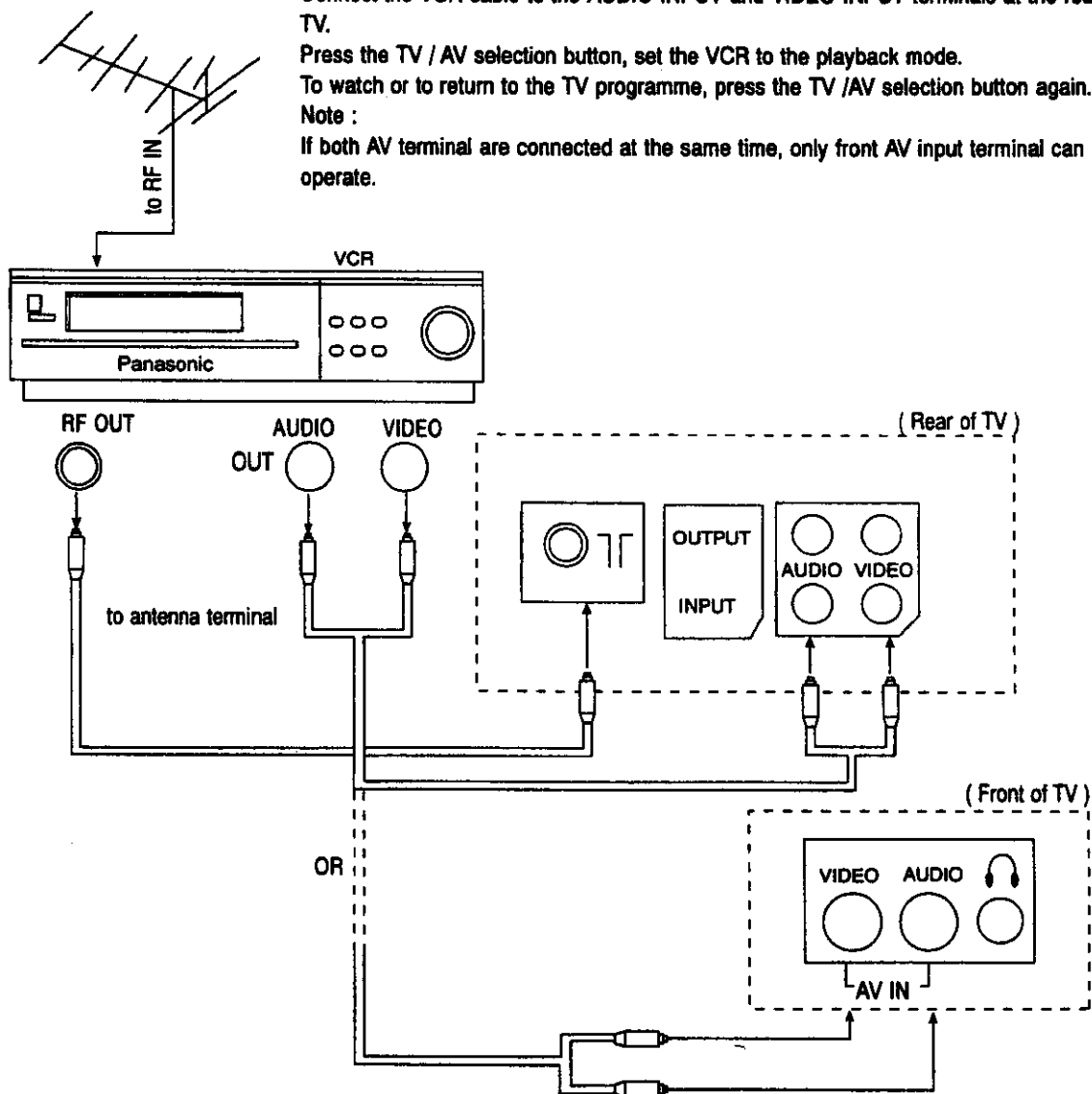
Connect the VCR cable to the AUDIO INPUT and VIDEO INPUT terminals at the rear of TV.

Press the TV / AV selection button, set the VCR to the playback mode.

To watch or to return to the TV programme, press the TV / AV selection button again.

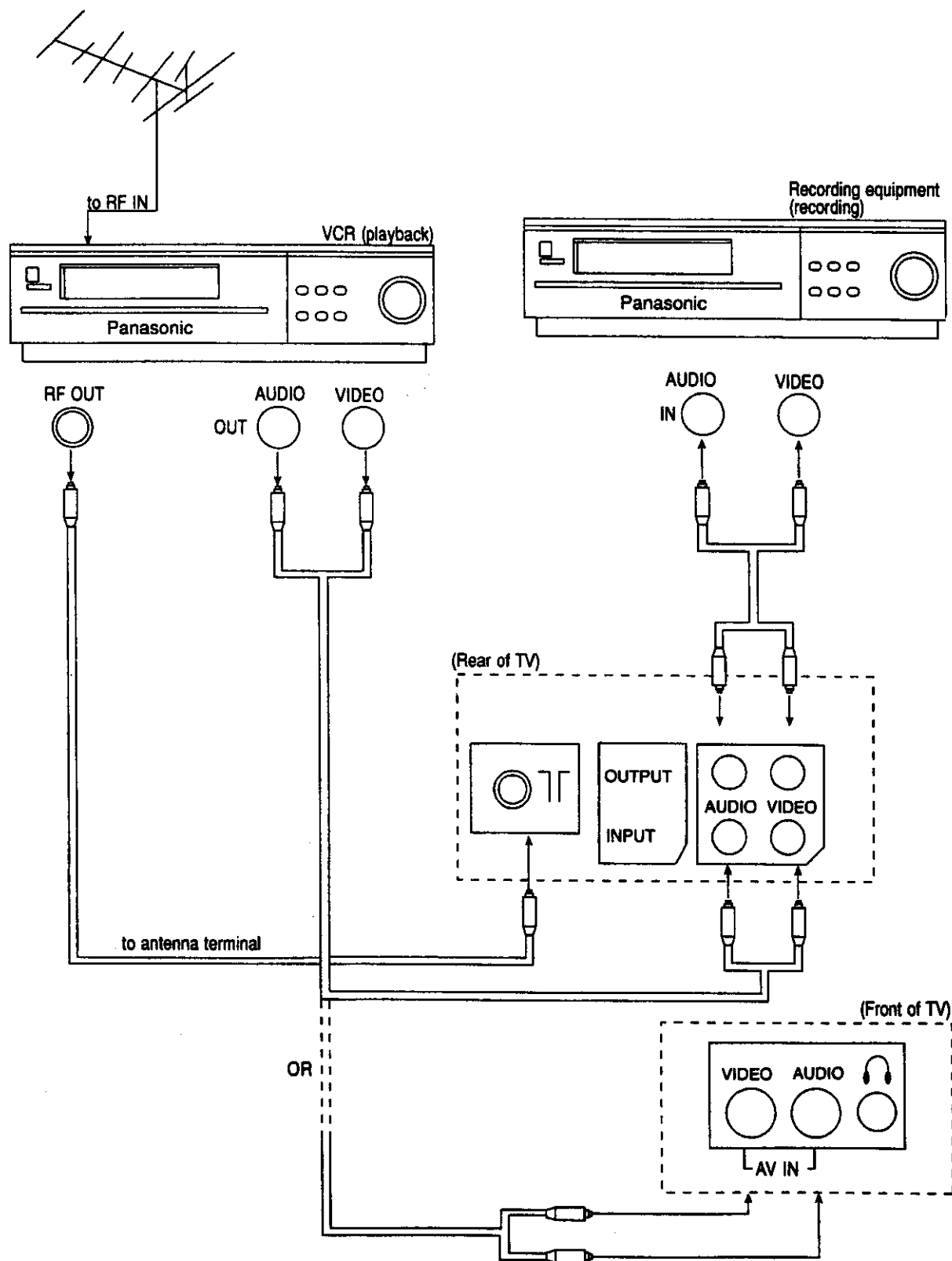
Note :

If both AV terminal are connected at the same time, only front AV input terminal can operate.













Recording












Follow the connection shown below when you want to copy a programme from another tape (VCR).
You can either use the AV input at the back of the TV.



Troubleshooting

Before calling for service, determine the symptoms and make a few simple checks as shown below.

Picture	Sound	Countermeasure
 Snowy Picture	 Noisy Sound	Aerial location, direction connection
 Multiple Image	 Normal Sound	Aerial location, direction connection
 Interference	 Noisy Sound	Electrical Appliances Cars / Motorcycles Fluorescent Lamps
 Normal Picture	 No Sound	(Check whether the mute function has been activated on the remote control).
 No Colour	 Normal Sound	Colour Control

 No Picture	 No Sound	Not plugged into AC outlet. Not switched on. Contrast and Brightness / Volume Setting (check by pushing the Power Switch or Stand-by button on remote control)
 Scrambled	 Weak Sound	Re-tune channels
 Colour Patches	 normal Sound	Magnetic interference from unshielded equipment. Receiver moved while " ON ".
 No Colour	 RollingPicture	 H-Line
 H-Line	 Noisy Sound	

Specifications

Power Source	: AC AUTO 110 - 240V, 50/60Hz
Picture Tube	: 54cm measured diagonally, 90° deflection
Power consumption	: 92 W
Audio Output	: 5 W
Dimension (W x D x H)	: 630 x 481 x 472 mm
Weight (Net)	: 22.0 kg
Receiving System	: 4 SYSTEM PAL B, G NTSC M NTSC (VTR playback only) PAL 60Hz

Receiving Channels :

VHF BAND
1 - 11 PAL B, G
UHF BAND
21 - 69 PAL B, G
CATV
S1 - S41 (HYPER)

Note :

Design and Specifications are subject to change without notice.

Matsushita Electric Industrial Co., Ltd

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